NAVAL SEA SYSTEMS COMMAND

# Land Attack

W A R F A R E





NAVAL SURFACE WARFARE CENTER

DAHLGREN DIVISION

DAHLGREN PANAMA CITY DAM NECK

## New Vision, New Challenge

The Surface Navy of the twenty-first century will be an offensive maritime force able to conduct precision land attack as part of joint, allied, and coalition forces. Through a seamless joint command and control, intelligence, surveillance, and reconnaissance (C2ISR) system and fully leveraged core competencies in power projection, surface combatants will project power from 25 miles offshore to ranges greater than 1,000 miles inland. These land attack warfare capabilities are currently planned for 49 AEGIS ships and 32 DD 21 class ships.

The land attack vision is to meet the challenges of the future Surface Navy with precision targeting, integrated mission planning, quick-reaction fires coordination and weapons control, a sustainable set of complementary precision weapons, robust real-time communications, and seamless interfaces across joint and coalition forces.

To accomplish this, the various programs and facilities at Naval Surface Warfare Center, Dahlgren Division (NSWCDD), with their long history of systems engineering of complex warfare systems, have joined together to lead, coordinate, and integrate the land attack system. NSWCDD is a recognized world leader in combat systems design, surface strike weapons control systems design, naval surface fire support systems development, tactical computer program development, and warhead design.

The Dahlgren Division has the facilities and expertise to conduct theater-level warfare systems engineering as well as the full spectrum of weapon system development. To be fully prepared for the twenty-first century Surface Navy, we are aggressively advancing these capabilities for Land Attack Warfare System development.

## Leadership Roles

NSWCDD's role is to lead the systems engineering, coordinate the development of the elements, and integrate the entire Land Attack Warfare System for the Surface Navy. Our responsibilities include leadership roles in:

- Land Attack Warfare System design
- AEGIS Combat System Engineering
- DD 21 Technical Team 21
- Naval Fires Control System (NFCS) development
- Extended Range Guided Munition (ERGM) development
- MK 160, Mod 8 Gun Control System design
- 5-inch/62 Gun System upgrade
- · Land Attack Standard Missile (LASM) System Engineering
- Tomahawk Weapon Control System design, integration, and testing
- · Tomahawk Weapon System engineering
- Advanced Gun System (AGS) concepts assessment
- Vertical Launching System (VLS) integration
- UAV Tactical Control System (TCS) development
- · Land attack technology development

# Areas of Expertise

- · Warfare analysis
- · System effectiveness and cost analysis
- · Modeling and simulation
- Global Positioning System (GPS) technology
- Targeting sensors and satellite systems
- Unmanned Aerial Vehicle (UAV) Mission Planning and Control System design and development
- · Mission planning systems analysis and engineering
- Total ship and combat system engineering
- Weapon system design and evaluation
- · Sensor system design and integration
- · Command and control system engineering
- · Digital system design, integration, and validation
- Complex, real-time computer program development
- Systems engineering of weapon systems
- · Weapon control system design, integration, and validation
- Warfare system engineering

# Supporting Facilities

- AEGIS Combat System Laboratory
- Strike Warfare System Integration Laboratory
- Mission Planning Center
- UAV Tactical Control System Laboratory
- Gun Control System, MK 160 Laboratory
- Naval Fires Control System (NFCS) Land-Based Test Site
- Targeting Sensor Test, Evaluation, Assessment, Modeling, and Simulation Facility (TEAMS)
- Instrumented Potomac River Test Range
- Search and Track System Test Site
- Combat Systems Advanced Concepts and Technology (CSACT) Laboratory
- DD 21 Collaborative Engineering Data Center
- Tomahawk War Room
- Land Attack War Room
- Modeling and Simulation Focus Center
- Theater Warfare Center



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For additional information, please contact:

#### **NSWCDD Public Affairs**

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We are looking for scientists and engineers in different fields. For employment opportunities, please send your resume to:

#### **NSWCDD College Recruiting Program**

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Internet: www.nswc.navy.mil/P/RECRUIT/recruit.html